

## SOLAPUR UNIVERSITY, SOLAPUR FACULTY OF ENGINEERING & TECHNOLOGY Civil Engineering Programme Educational Objectives and Outcomes

## **Program Educational Objectives (PEOs): Civil Engineering**

The Program Educational Objectives for Civil Engineering program are designed to produce competent civil engineers who are ready to contribute effectively to the advancement of civil engineering and to fulfil the needs of the community. These objectives are as follows:

- 1. Graduates will be prepared with strong engineering fundamentals leading to excellent performance in professional career in planning, designing, construction, operation & maintenance of the built environment and global infrastructure that meet the societal needs.
- 2. Graduates will exhibit strong technical ability to create & synthesize data using relevant tools and concepts, for providing sustainable solutions to civil engineering problems and projects.
- 3. Graduates will exhibit excellent interpersonal communication and resourcemanagement skills as leaders in the civil engineering profession while working as a part of multidisciplinary team.
- 4. Graduates will be prepared with sound foundation in mathematics, science and in Civil Engineering to prepare them for higher studies and research.
- 5. Graduates will possess a breadth of knowledge and engage themselves in the life-long learning to meet challenges of globalisation.
- 6. Graduates will have a sense of responsibility, respect towards society & its heritage and will follow the professional ethics.

## **Program Outcomes (POs): Civil Engineering**

The program outcomes of Civil Engineering Program are summarised as following

- a. Students will demonstrate the basic knowledge of mathematics, science and engineering.
- b. Students will demonstrate ability to design and conduct experiments, interpret & analyse data and report results.
- c. Students will demonstrate an ability to design a system, component, or a process that meets desired specifications within realistic constraints.
- d. Students will demonstrate an ability to function in multidisciplinary team.
- e. Students will demonstrate the ability to identify, formulate and solve civil engineering problems.
- f. Students will demonstrate the understanding of their professional responsibilities ethically.
- g. Students will be able to communicate effectively to all concerned.
- h. Students will have the confidence to apply engineering solutions in global and social context.
- i. Students will recognize the need for and an ability to engage in life-long learning.
- j. Students will have broad education for understanding the impact of engineering solutions in a global, economic, environmental, and societal context.
- k. Students will possess an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

w. e. f. Academic Year 2013-14